#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000627 Address: 333 Burma Road **Date Inspected:** 11-Oct-2007

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No n/a **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Plate Material/ Check Samples

### **Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Sherri Brannon arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QA Inspector observed and/or discovered the following.

## Plate Material Storage Yard (production):

Quality Assurance (QA) Inspector Brannon received plate material list for batch #21, production plate list No. 1672, 1694~1811 received from American Bridge/Fluor (ABF). QA Inspector Brannon went to the ZPMC material storage yard accompanied by ZPMC Quality Assurance Mr. Fu Jun. QA Inspector Brannon observed a total of 2 out of 119 plates for batch #21. The plates were observed for their general condition and markings. Plate material thicknesses range from 12mm to 20mm. The plates were designated as A709M-345T2, A709M-345T2-X,A709M-345F2-X and A709M-345T2-X-S. Plate material list for batch #21 was accompanied with material test reports (MTR's). The MTR's could not be reviewed on this date and will be reviewed at the earliest opportunity. QA Inspector Brannon assigned lot number B22-046-07 to the 2 plates observed on this date.

#### Plate Material Storage Yard (u-rib welding trial):

Quality Assurance (QA) Inspector Brannon received plate material list for U-Rib welding trial, plate list No. 1~10 received from American Bridge/Fluor (ABF). QA Inspector Brannon went to the ZPMC material storage yard accompanied by ZPMC Quality Control Miss. Shi Chunyan and Mr. Sun Bo. QA Inspector Brannon observed a total of 10 out of 10 plates. The plates were observed for their general condition and markings. Plate material thickness for all 10 plates was 14mm. The plates were designated as A709M-345T2-X-S. Plate material list for the U-Rib welding trial was accompanied with material test reports (MTR's). QA Inspector reviewed the MTR's

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and noticed that their was no fine grain analysis on the MTR's sheets. QA Inspector Brannon informed QA Task Leader MR. Robert Cuellar of these findings. QA Inspector Brannon assigned lot number B22-047-07 to the 10 plates observed on this date.

Plate Material Storage Yard (check samples):

Quality Assurance (QA) Inspector Brannon received plate material list for Caltrans check test samples, plate list No. 13~21 (second batch) received from American Bridge/Fluor (ABF). QA Inspector Brannon went to the ZPMC plate material storage yard accompanied by ZPMC Quality Control Miss. Shi Chunyan and Mr. Sun Bo. QA Inspector Brannon verified, plate ID #, Grade, Batch # and material test reports. QA Inspector Brannon wrote lot numbers and marked the direction of rolling on each of the 9 samples. Caltrans lot numbers for check samples are as follows.

No. 13, ID#NG070508G229, Grade A709M-345F2, Batch No. 74500703212756, MTR No. 1968,

Remarks-SPCM, Lot No. B22-056-07

No. 14, ID#NG070514G018, Grade A709M-345F2, Batch No. 74500703212755, MTR No. 1969,

Remarks-SPCM, Lot No. B22-054-07.

No. 15, ID#NG070514G038, Grade A709M-345F2-X, Batch No. 071015330601, MTR No. 3333,

Remarks-SPCM, Lot No. B22-050-07.

No. 16, ID#NG070524G006, Grade A709M-345F2-X, Batch No. 072015440101, MTR No. 3322, Remarks-OBG, Lot No. B22-049-07.

No. 17, ID#NG070524G028, Grade A709M-345F2-X, Batch No. 071015470301, MTR No. 3325, Remarks-OBG, Lot No. B22-048-07.

No. 18, ID#NG070524G042, Grade A709M-345F2-X, Batch No. 072015130401, MTR No. 3323,

Remarks-SPCM, Lot No. B22-053-07.

No. 19, ID#NG070508G174, Grade A709M-345F2-X-S, Batch No. 74500702264465, MTR No. 2104, Remarks-OBG. Lot No. B22-051-07.

No. 20, ID#NG070508G150, Grade A709M-345F2-X-S, Batch No. 74500702284709, MTR No. 2098, Remarks-OBG. Lot No. B22-052-07.

No. 21, ID#NG070514G165, Grade A709M-345F2-X-S, Batch No. 74500702284711, MTR No. 2102, Remarks-OBG. Lot No. B22-055-07.

The above lot numbers were written on the each check sample along with an arrow showing the direction of rolling.

The lot numbers, date, batch/heat numbers, plate type/grade and plate thickness were all entered on the Caltrans check sampling tracking log for Caltrans Project 04-0120F4. Note: QA Inspector Brannon informed QA Lead Task Leader Mr. Dave McClary that the Plate ID #, Grade, Batch No, and plate thicknesses had been written on the check samples by ZPMC personnel. Mr. McClary stated that the Plate ID #, Grade and Batch No, should not have been written on the check samples. QA Inspector Brannon informed ZPMC Quality Control Miss. Shi Chunyan and Mr. Sun Bo that the Plate ID #, Grade and Batch No. should be removed from the check samples and Mr. Bo agreed. QA Inspector Brannon and ZPMC Quality Control Miss. Shi Chunyan and Mr. Sun Bo observed ZPMC personnel remove Plate ID #, Grade and Batch No. from the check samples by method of grinding. Mr. Bo informed QA Inspector Brannon that the check samples will be sent to Shanghai Testing Lab tormorrow.

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# **Summary of Conversations:**

As stated within the report.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Brannon,Sherri	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer